

CLAIMS

1. A method of enabling a multitasking computing device to preserve system resources, comprising the steps of (a) determining if an untrusted application is in the background or foreground and (b) suspending the running of an untrusted application while that application is in the background but allowing the untrusted application to run again once in the foreground.
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2. The method of Claim 1 in which a window server component determines if the untrusted application is in the background or foreground.
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3. The method of Claim 2 in which, for an untrusted application in the background, the window server sends a control signal to a scheduler or interrupt handler to prevent the application from running.
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4. The method of Claim 1 comprising the further step of preventing an untrusted background application from 'polling' for data over a wireless network.
5. The method of Claim 1 comprising the further step of preventing an untrusted background application from running if a display shows a screen saver or is turned off.
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6. The method of Claim 1 in which a trusted application in the background is (i) still allowed to run, or (ii) actively prevented from running or (iii) requested to stop running .
- 25 7. The method of Claim 1 in which an application has been deemed to be untrusted by the device assessing:
 - (a) which protected resources on the device can be accessed by the application; or
 - (b) whether the application was loaded from ROM or RAM; or
 - (c) whether the application has been validated using some predefined validation or
30 certification process.
8. The method of Claim 7 in which a background application is prevented from running only if it does not meet predefined 'trust' or certification criteria established using a signature in an installation file for the application.

9. The method of Claim 1 in which the device is battery powered.
10. The method of Claim 1 in which the system resources that are preserved are one
5 or more of (i) power, (ii) CPU activity and (iii) scheduler activity.
11. The method of Claim 1 in which the device is powered by a UPS (uninterruptible
power supply).
- 10 12. A multitasking computing device programmed to be capable of (a) determining
if an untrusted application is in the background or foreground and (b) suspending the
running of an untrusted application while that application is in the background but
allowing the untrusted application to run again once in the foreground.
- 15 13. The device of Claim 11 which is battery powered.
14. An operating system for a multitasking computing device, the operating system
being capable of (a) determining if an untrusted application is in the background or
foreground and (b) suspending the running of an untrusted application while that
20 application is in the background but allowing the untrusted application to run again once
in the foreground.